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JR

Application No. 10/501,100
Amendment dated January 25, 2008
After Final Office Action of October 12, 2007

Docket No.: 09852/0201465-USO

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently amended) A Ni based alloy with excellent corrosion resistance relative to supercritical water environments containing inorganic acids consisting of in weight basis:

Cr: from more than 43% to 50% or less, Mo: 0.1% to 2%, Mg: 0.001% to 0.05%, N: 0.001% to 0.04%, Mn: 0.05% to 0.5%,

at least one of Fe: 0.05% to 1.0% of and Si: 0.01% to 0.1%,

and a remainder as Ni and unavoidable impurities,

wherein a quantity of C amongst said unavoidable impurities is restricted to 0.05% or less, and the Ni based alloy consists essentially of a stabilized Ni-FCC [[Fcc]] matrix.

3. (Previously presented) A member for a supercritical water process reaction apparatus, wherein said member comprises a Ni based alloy according to claim 2.

4. (Withdrawn) A Ni based alloy with excellent corrosion resistance relative to supercritical water environments containing inorganic acids comprising:

Cr: from 29% to less than 42%, and Ta: from more than 1% to 3% or less,

further comprising Mg: 0.001% to 0.05%, N: 0.001% to 0.04%, and Mn: 0.05% to 0.5%,

wherein the Mg, N, and Mn are jointly incorporated such that the crystal phase stability of the Ni fcc lattice is improved;